

EAST search:

IS&R	L1	1	("5474911").PN.	USPAT; USOCR	2009/01/21 12:28
BRS	L2	54393	polymerase	USPAT	2009/01/21 12:54
BRS	L3	11110	12 and (binding adj domain)	USPAT	2009/01/21 12:54
BRS	L4	10260	13 and (nucleic adj acid)	USPAT	2009/01/21 12:55
BRS	L5	5589	13 and (DNA adj binding)	USPAT	2009/01/21 12:55
BRS	L7	5079	15 and fusion	USPAT	2009/01/21 12:56
BRS	L8	4316	17 and (fusion adj protein)	USPAT	2009/01/21 12:56
BRS	L9	1917	18 and (dna adj polymerase)	USPAT	2009/01/21 12:57
BRS	L10	5	19 and (polymerase adj fusion)	USPAT	2009/01/21 12:58
BRS	L12	11	19 and (polymerase adj domain)	USPAT	2009/01/21 13:06
BRS	L13	13325	(DNA adj binding)	USPAT	2009/01/21 13:19
BRS	L14	5221	(DNA adj binding adj domain)	USPAT	2009/01/21 13:19
BRS	L16	4369	12 and 114	USPAT	2009/01/21 13:20
BRS	L17	147	(polymerase adj domain)	USPAT	2009/01/21 13:20
BRS	L18	13	114 and 117	USPAT	2009/01/21 13:20
BRS	L19	86	117 and covalent	USPAT	2009/01/21 13:24

US 6365355 - McCutchen-Malone teach Chimeric proteins for detection and quantitation of DNA mutations, DNA sequence variations, DNA damage and DNA mismatches.

BRS L1 7540 exonuclease USPAT 2009/01/21 19:43

BRS L3 5221 (DNA adj binding adj domain) USPAT 2009/01/21 19:44

BRS L4 659 11 and L3 USPAT 2009/01/21 19:44

BRS L6 2 15 and (exonuclease adj domain) USPAT 2009/01/21 19:45

BRS L5 505 14 and (fusion adj protein) USPAT 2009/01/21 19:45

US 6607883 Frey et al. teach polymerase chimeras which are composed of amino acid fragments representing domains and which combine properties of naturally occurring polymerases that are advantageous with regard to a particular application. Frey et al. teach that it has surprisingly turned out that the domains from the various enzymes are active in the chimeras and exhibit cooperative behavior. In addition the present invention concerns a process for the production of the chimeras according to the invention and the use of these chimeras for the synthesis of nucleic acids e.g. during a polymerase chain reaction. Moreover the present invention concerns a kit which contains the polymerase chimeras according to the invention.

Frey et al. specifically teach a polymerase chimera or an improved polymerase comprising two joined heterologous domains, in which one domain is a domain having polymerase activity derived from a first polymerase and a second domain is a domain having 3'-5' exonuclease activity derived from a second polymerase. The second domain having 3'-5' exonuclease activity derived from

a second polymerase is a sequence non-specific double-stranded nucleic acid binding domain.